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# SECTION 608 CONCRETE SIDEWALKS

## 608.01 DESCRIPTION

This work is the construction of concrete sidewalks, and the placing of Detectable Warning Devices at the locations shown in the plans.

## 608.02 MATERIALS

Furnish materials meeting the following Section and Subsection requirements:

Classes "A" and "D" Portland Cement Concrete ......551
Reinforcing Steel ......711.01
Joint Materials ......707.01

Use only detectable warning devices that meet all of the Department's requirements and are on the qualified products list (QPL). The QPL requirements and list can be found at <a href="http://www.mdt.mt.gov/business/contracting/qpl.shtml">http://www.mdt.mt.gov/business/contracting/qpl.shtml</a>

The domes must be aligned in a square or radial grid pattern with a base diameter of 0.9 in (23 mm) minimum to 1.4 in (36 mm) maximum, a top diameter of 50 percent of the base diameter minimum to 65 percent of the base diameter maximum, and a height of 0.2 in (5 mm). Use detectable warning devices that are a brick red color.

## **608.03 CONSTRUCTION REQUIREMENTS**

Construct concrete sidewalks as specified in the contract and as follows.

## 608.03.1 Subgrade and Forms

Excavate, shape, and compact the foundation to the specified width and grade.

Place and compact aggregate base to the specified thickness.

Use forms and form meeting Section 552 and Subsection 609.03 requirements.

## 608.03.2 Concrete

Furnish and place concrete meeting Section 551 requirements.

Place reinforcing steel as specified.

Dampen the foundation and forms immediately before placing concrete.

Do not place concrete on a frozen foundation course or subgrade.

Construct sidewalks meeting Subsections 501.03.18 and 501.03.19 requirements.

Construct and install truncated domes as shown on the plans and Detailed Drawings. Use red brick color dye in the concrete mix prior to precasting.

## 608.03.3 Detectable Warning Devices

Install detectable warning devices so they extend the full width of the ramp and the edge of the dome panel is located no more than 6 inches (150 mm) from the back of curb. If the detectable warning device used is embedded in concrete, install so the top of the panel is flush with the adjacent concrete and the domes will protrude above the adjacent surface.

## **608.04 METHOD OF MEASUREMENT**

Concrete sidewalk is measured by the square yard (square meter), including wheelchair ramps.

<u>Detectable warning devices</u> are measured by the square yard (square meter) to the nearest 0.1 square yard (0.1 square meter).

A. Contracts with Sidewalk Work Not in Conjunction with Roadway Reconstruction.

Reinforcing steel, expansion joint material, bond breaker, excavation or embankment,

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crushed gravel base, and disposal of material associated with the work are not measured for payment.

**B.** All Other Contracts. Reinforcing steel, expansion joint material, bond breaker, disposal of material, and crushed gravel base are not measured for payment. Excavation or embankment associated with the work is measured by the cubic yard (cubic meter).

## 608.05 BASIS OF PAYMENT

Payment for the completed and accepted quantities is made under the following:

Pay ItemPay UnitSidewalk-ConcreteSquare Yard (square meter)Detectable Warning DeviceSquare Yard (square meter)

- A. Contracts with Sidewalk Work Not in Conjunction with Roadway Reconstruction.

  The cost of reinforcing steel, expansion joint material, bond breaker, excavation or embankment, crushed gravel base, and disposal of material associated with the work are included in the contract unit price of sidewalk.
- **B.** All Other Contracts. The cost of reinforcing steel, expansion joint material, bond breaker, crushed gravel base, and disposal of material associated with the work are included in the contract unit price of sidewalk. Excavation or embankment associated with the work is paid for under the specified type of earthwork.

<u>Include the cost of the concrete used under the detectable warning devices in the square</u> area of Detectable Warning Devices.

Payment at the contract unit price is full compensation for all resources necessary to complete the item of work under the contract.